

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application and reflects the addition of new claim 26.

Listing of Claims:

1. (Currently Amended) A process for producing alkali metal chlorate in an electrolytic cell, said cell being divided by a cation selective separator into an anode compartment in which an anode is arranged and a cathode compartment in which a gas diffusion electrode is arranged, said process comprising introducing an electrolyte solution having a pH from about 5.5 to about 8 containing alkali metal chloride into the anode compartment and an oxygen-containing gas into the cathode compartment; electrolysing the electrolyte solution to produce alkali metal chlorate in an electrolysed solution in the anode compartment, electrolysing oxygen introduced into the cathode compartment resulting in the formation of alkali metal hydroxide in the cathode compartment; transferring the electrolysed solution from the anode compartment to a chlorate reactor to react the electrolysed solution further to produce a concentrated alkali metal chlorate electrolyte wherein the concentrated electrolyte contains from about 650 to about 1200 g/l of chlorate.

2. (Original) A process according to claim 1, wherein said gas diffusion electrode divides the cathode compartment into a gas chamber on one side of the gas diffusion electrode and an alkali metal hydroxide chamber on the other side thereof confined between the gas diffusion electrode and the cation selective separator, introducing an alkali metal hydroxide solution into the alkali metal hydroxide chamber and the oxygen-containing gas into the gas chamber.

3. (Original) A process according to claim 1, wherein the cation selective separator is a cation selective membrane.

4. (Cancelled)

5. (Original) A process as claimed in claim 1, wherein the electrolyte solution has an alkali metal chloride concentration from about 50 to about 250 g/l.

6. (Original) A process as claimed in claim 1, wherein the electrolyte solution introduced into the anode compartment has an alkali metal chlorate concentration from about 300 to about 650 g/l.

7. (Original) A process as claimed in claim 1, wherein the electrolyte solution has an alkali metal chlorate concentration from about 1 to about 50 g/l.

8. (Original) A process as claimed in claim 1, wherein the electrolyte solution has an alkali metal chromate concentration is from about 0.01 to about 10 g/l.

9. (Original) A process as claimed in claim 1, wherein the electrolyte solution contains no alkali metal chromate.

10. (Original) A process as claimed in claim 1, wherein the cathode compartment has an alkali metal hydroxide concentration from about 10 to about 400 g/l.

11. (Original) A process as claimed in claim 1, wherein the cell has a temperature from about 40 to about 100° C.

12. (Original) A process as claimed in claim 1, wherein alkali metal hydroxide is transferred to the chlorate reactor.

13. – 22. (Cancelled)

23. (Previously Presented) A process according to claim 1, wherein said gas diffusion electrode divides the cathode compartment into a gas chamber on one side of the gas diffusion electrode and an alkali metal hydroxide chamber on the other side thereof confined between the gas diffusion electrode and the cation selective separator,

introducing an alkali metal hydroxide solution into the alkali metal hydroxide chamber and the oxygen-containing gas into the gas chamber, wherein the cation selective separator is a cation selective membrane, and wherein the electrolyte solution has a pH from about 5.5 to about 8.

24. (Previously Presented) A process according to claim 10, wherein the cathode compartment has an alkali metal hydroxide concentration from about 40 to about 160 g/l.

25. (Previously Presented) A process according to claim 1, wherein said gas diffusion electrode is arranged on the separator.

26. (Currently Amended) A process for producing alkali metal chlorate in an electrolytic cell, said cell being divided by a cation selective separator into an anode compartment in which an anode is arranged and a cathode compartment in which a gas diffusion electrode is arranged, wherein said gas diffusion electrode divides the cathode compartment into a gas chamber on one side of the gas diffusion electrode and an alkali metal hydroxide chamber on the other side thereof confined between the gas diffusion electrode and the cation selective separator, said process comprising introducing an electrolyte solution containing alkali metal chloride and alkali metal chlorate into the anode compartment, wherein said electrolyte solution has an alkali metal chloride concentration from about 50 to about 250 g/l, an alkali metal chlorate concentration from about 300 to about 650 g/l and a pH from about 5.5 to about 8, and introducing an aqueous solution consisting essentially of water and alkali metal hydroxide, having an alkali metal hydroxide concentration from about 40 to about 160 g/l, into the alkali metal hydroxide chamber and oxygen-containing gas into the gas chamber; electrolyzing the electrolyte solution to produce alkali metal chlorate in an electrolyzed solution in the anode compartment, electrolyzing oxygen introduced into the cathode compartment resulting in the formation of alkali metal hydroxide in the cathode compartment; transferring the electrolyzed solution from the anode compartment to a chlorate reactor to react the electrolyzed solution further to produce a

concentrated alkali metal chlorate electrolyte wherein the concentrated electrolyte contains from about 650 to about 1200 g/l of chlorate.